Fig. 1 was prepared by Mrs. Maryellin Reinecke. We wish to thank Mr. John Q. Burch for bringing this problem to our notice and for furnishing the specimens of both forms.

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## NEW SPECIES OF OLIVA FROM WEST MEXICO

BY JOHN Q. AND ROSE L. BURCH

The literature on the history and many variations of the species commonly known as Oliva spicata (Röding, 1798) is voluminous. The disposition of most modern authors has been to lump all varieties as forms of one species. In our opinion, the last word has not been written on this assemblage.

In our work, Minutes of the Conchological Club of Southern California, no. 184, p. 20, Jan. 1959, we discussed the problem of the two species studied by Donohue and Hardcastle. Mr. W. E. Naylor of San Diego, a dealer in commercial shells, referred this problem to us. His trade in olives is largely to the Indians who use the shells to make various artifacts. The Indians rejected one variety claiming that they shatter when worked and are unsatisfactory. The acceptable variety is known to the trade as Oliva venulata Lamarck, 1811. These shells are heavier, with lower spire, and more obese than the discarded lot. These specimens consistently have the base of the columella with a white color and perhaps a tinge of pink. Shells of the rejected lot are more slender, higher spired, and the base of the columella is consistently a light purple instead of white. The interior of both is a bluish white. At first glance the shells in question seem to be very similar, but after a little study they readily separate into two forms. The studies of Donohue and Hardcastle have shown that the two forms differ in the chemical analysis of the shell. Both forms are found on the same tide flats at La Paz, Baja California, Mexico, with no intergrades in many hundreds of specimens. Certainly many species are recognized upon much more meagre grounds.

In our preliminary discussion, for convenience, we assigned the discarded form to *Oliva ustulata* Lamarck, 1811. Several very different forms have been recognized by various authors under this name. Tryon in the Manual of Conchology thought it to be a variety of the Atlantic *Oliva reticularis* Lamarck, 1811. Charles Johnson thought it to be a form in which the pattern of the shell is obscured by a dark brown layer. In our opinion, the name *Oliva ustulata* Lamarck cannot be used for this form. Seemingly the species of *Oliva* under discussion has been considered a form of the typical by all authors we have consulted. Therefore, we feel justified in giving it a name and the status of a new species.

OLIVA REJECTA, new species.

Plate 17, left figs.

Shell cylindrically oblong; spire exserted, prominent; color white with a closely reticulate pattern of chocolate; base of columella purple, swollen, with 4 plaits; interior of aperture bluish white. Length: 35.5 mm. Greatest diameter: 15 mm. Type locality: tide flats at La Paz, Baja California.

A comparison of the dimensions of the type of the new species with those of a normal specimen of *Oliva venulata* Lamarck is of interest. Both specimens measure exactly 35.5 mm. in length, but the greatest diameter of *Oliva rejecta* is 15 mm., while that of *Oliva venulata* is 17.5 mm. Also, the greatest diameter of *Oliva rejecta* is much lower on the body whorl.

The holotype is to be deposited in the California Academy of Sciences, San Francisco, no. 12400. Fifty paratypes will be distributed to various institutions.

## NOTES AND NEWS

BULIMULUS DEALBATUS JONESI Clench appears to be *Bulimulus mooreanus* (Pfeiffer) which has been introduced into Alabama. It is somewhat smaller than is usual for the species in Texas, but is otherwise typical. Unlike *B. dealbatus* (Say), it estivates on the weeds where it can be found in large numbers even in the hottest part of the summer. — LESLIE HUBRICHT.